

Amendments to the Claims

Claim 1 (Original): An isolated polynucleotide encoding a protein having expansin activity wherein said polynucleotide hybridizes under high stringency conditions corresponding to 6X SSC, 50% formamide and 42°C, and washing at 0.2 X SSC at 65°C with the complement of the sequence set forth in SEQ ID NO:1.

Claims 2-3 (Canceled).

Claim 4 (Previously presented): An isolated polynucleotide which encodes an expansin polypeptide, said polypeptide capable of restoring endogenous cell wall extension activity of heat inactivated cell walls and wherein said polynucleotide hybridizes under high stringency conditions corresponding to 6X SSC, 50% formamide and 42°C, and washing at 0.2 X SSC at 65°C with SEQ ID NO:1.

Claims 5-11 (Canceled).

Claim 12 (Currently amended): An isolated nucleotide sequence which encodes upon expression a protein with expansin activity, said sequence identified by the method of claim 11 comprising:
designing a degenerate primer about 4-30 contiguous bases to amplify expansin encoding DNA based upon the N-terminal amino acid sequence of SEQ ID NO:7;
amplifying a cDNA fragment from said primer;

screening a cDNA library to identify a full length coding sequence of an expansin protein.

Claims 13-22 (Canceled).